The Political Economy of Russia's Reimagined Arctic

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This article examines Russia's evolving approach to Arctic development in light of the Kremlin's "Asian pivot" and the ongoing political rift between Russia and the West over the crisis in Ukraine. Specifically, I contend that the Arctic represents a key component of Moscow's attempts to reorient geopolitically and economically after its annexation of Crimea, and that it is part of a larger, long-term plan to develop Siberia and the Russian Far East as both a resource base for the country and a transit route for goods moving between Asia and Europe. Consequently, this piece assesses the region's political economy from the perspective of two interrelated Arctic projects—the construction of the Yamal LNG facility and government-led efforts to promote utilization of the Northern Sea Route.* Adopting a constructivist approach, I argue that Russia's recent efforts to develop the Arctic are motivated not only by material incentives, but also involve a significant status-seeking component that draws on Russia's view of itself as the preeminent Arctic power.

The Arctic is staggeringly rich in natural resources, with an oft-cited 2008 United States Geological Survey report estimating that it harbors "undiscovered, technically recoverable" hydrocarbons equivalent to 90 billion barrels of oil, 1,670 trillion cubic feet of natural gas, and 44 billion barrels of natural gas liquids, or approximately 22 percent of the globe's unexploited reserves (Stauffer, 2008). This is in addition to sizable mineral deposits, which run the gamut from prosaic metals like lead and copper to more precious commodities such as gold, diamonds, and various rare-earth elements. Its biological resources are also impressive; for example, major cod and haddock stocks exist in the Barents Sea. As a result, with ice cover on northern waters shrinking precipitously over the last several decades and technological innovations making possible commercial activities unthinkable just a few years ago, it is becoming increasingly plausible to talk about the large-scale development of the Arctic. This holds true not only across extractive industries, but also in the shipping sector.

Russia, given its propitious geology, long history of Arctic engagement, and the sheer size of its northern territories, is particularly well-positioned to benefit from this confluence of events

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* A far shorter and less developed discussion of these two projects (and Russia's economic goals in the Arctic more generally) previously appeared in Soroka, 2016.

under favorable macroeconomic conditions. Even though the Russian Arctic is home to fewer than two million people (Ahlenius, 2008), the region already accounts for approximately onefifth of the country's GDP, and Moscow is eager to increase these numbers. Yet it has some catching up to do. For much of the 20th century the Arctic was a focal point for Soviet military and industrial activity, but the mounting fiscal pressures and competing political priorities that emerged in the wake of the Soviet Union's dissolution caused Russia to pull back from the High North in the early 1990s. It was not until the 2000s that the Kremlin's interest in the Arctic began to noticeably rekindle, fueled by a peculiar blend of resource nationalism and historically contingent ideas about the region's role in defining Russia's national identity and international standing.¹

Concerned with the present, this article examines Russia's economic push northward in light of its estrangement from the West and Moscow's attempts to rebalance geopolitical and trade relations toward the Pacific Rim. The argument advanced consists of two parts. First, I claim that material inducements are, by themselves, insufficient to explain the Kremlin's approach to developing the Arctic, especially as President Vladimir Putin has indicated that he wants Russia to be acknowledged as a major power by the global community and believes an active Arctic presence will help achieve this recognition. Consequently, Moscow's northern development strategy is mediated by a significant status-seeking imperative that not only complements economic incentives, but also aids in defining how these are understood and acted upon. Second, I claim that in the aftermath of the Ukraine crisis the role the Arctic plays in Russia's efforts to reorient toward Asia has been underappreciated. True, Moscow's attention began turning northward well before its March 2014 annexation of Crimea and the outbreak of fighting in the Donbas region; already in 2008, then-president Dmitrii Medvedev, speaking before the Security Council, stated that he wanted to "convert the Arctic into Russia's resource base for the 21st century" (2008). The Kremlin's "Asian pivot" predates it as well, Putin having explicitly called for this two years prior (2012b). Nonetheless, the worsening of relations with the West that resulted from the confrontation over Ukraine has intensified the emphasis placed on both developing the Arctic and establishing closer ties with Asia, serving to increasingly conflate these objectives while simultaneously foregrounding their status-related dimensions.

In examining how the latter interact with material incentives, a tripartite distinction between motivations, processual policy "drivers" and "audience effects" provides a useful heuristic (see Figure 1 below). At the top-most analytic level, Russia's plans for developing the Arctic—which represent a critical component of what may be thought of as a wider "nesting doll" economic strategy for Siberia and the Russian Far East, as well as Eurasia more generally—are spurred on by pragmatic as well as status-oriented motivations. Moscow is today striving to position itself at the head of a vast Eurasian confederation, one whose claim to occupying a distinctive geographic space is predicated on its latitudinal intermediation between Asia and Europe. At the same time, the longitudinal penetration of Russia's understanding of Eurasia is extending ever-further northward, propelled by economic pragmatism as well as resentment over how Russia has been treated in the international system.

However, while the economic allure of a warming Arctic is self-evident, the impetus for engaging in status-seeking behavior requires explanation. Nostalgia for the great-power standing Russia ceded when the bipolar world order that had characterized the latter half of the twentieth century crumbled has long been a prominent feature of its post-communist politics. Not only do surveys conducted over the last two-plus decades consistently show that a majority of the population regrets the Soviet Union's demise, but they likewise reveal many hold extremely negative opinions of the two men most identified with this outcome, Russia's first democratically elected (and pro-Western) president, Boris Yeltsin, and the hapless last leader of the Soviet Union, Mikhail Gorbachev. Consequently, striving to recover international prestige resonates with a domestic audience; while seeking after status is an avowedly elite-led phenomenon, it conspicuously taps into, and reinforces, mass demand. Putin, who once described the USSR's collapse as the "greatest geopolitical catastrophe" of the twentieth century (2005), finds this an attractive appeal to make, in his speeches repeatedly invoking imagery of the West trying to "put Russia on her knees" or "chain the Russian bear." As he emphasized in a February 2012 article penned while he was seeking re-election to a third presidential term, "Russia is accorded respect, and treated with consideration, only when she is strong and stands firmly on her feet" (2012b).

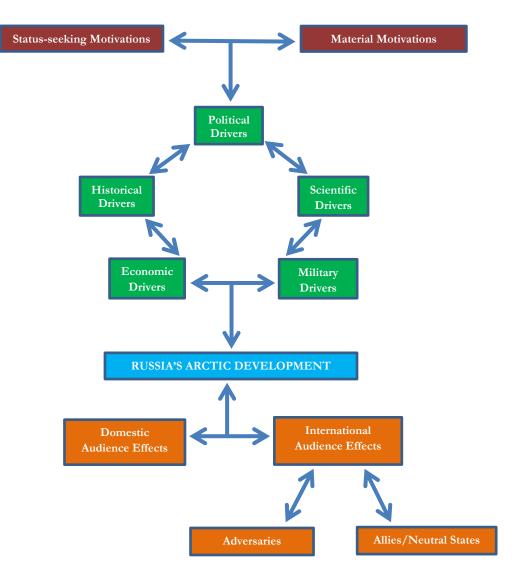


Figure 1: Conceptual representation of factors governing Russia's Arctic development strategy.

At a secondary level of analysis, there exist a number of policy drivers that serve as the mechanisms through which both material and status-related motivations are reified. They include economic, political, military, scientific and historical factors, all of which, to varying degrees, contain within themselves objective material and subjective perceptual components. Moreover, these are not discrete, self-contained units, but rather porous categories that interact dynamically. For example, developing an offshore hydrocarbon field is an economic endeavor, but it also generates military implications, such as the need to protect shipping lanes utilized by oil tankers and reinforce territorial claims.

Finally, who the intended audience is for these narratives and their associated behaviors matters (audience effects likewise do not exist just as outputs, but provide systemic feedback in ways that may affect drivers and even motivations). Emphasizing its Arctic identity for a domestic audience is certainly part of the appeal of increasing regional involvement, but Russia's actions also concurrently function to send messages to neighboring states and other countries interested in the Arctic. However, not only does the content of these dual communication streams vary (as they are expected to perform differing functions), but dealing with this "lack of alignment" and the consequent "potential for counter-productive setbacks caused by inconsistencies between them" poses a significant political challenge (Gorenburg, 2014). Illustrating this, there is a tension between Moscow's hardline domestic rhetoric concerning issues such as NATO's holding of military exercises in the region and the multi-track diplomatic cooperation Russia continues to exhibit in its relations with other northern NATO-member states,² both bilaterally and through organizations such as the Arctic Council.³

This mode of argumentation is informed by the theoretical framework of social constructivism, an underlying premise of which is that intersubjectively constructed identities affect how national interests are defined (Ruggie, 2000: 14). The "social facts" that emerge from this process may "differ fundamentally from material facts, the reality that exists irrespective of collective beliefs about its existence," but they do not lack causal power (Abdelal, Blyth & Parsons, 2005: n.p.). With regard to economics, this approach holds that the perception of material interests is not universal, but rather the product of specific contexts and actors, with ex-ante collective identities and beliefs "endowing the economies in which they are embedded with social purposes" (Abdelal, Blyth & Parsons, 2010: 9). It would therefore be a mistake to interpret what is happening in the Russian Arctic only through the prism of *realpolitik* and a rationalist, material ontology that overlooks the ability of social agency to create meaning.⁴ Factors other than objectively knowable, tangible facts may serve to accentuate or attenuate the attractiveness of various economic options, allowing, for example, fiscally sub-optimal projects to be pursued if they satisfy status-seeking demands. Exactly this tendency is today being evinced in Moscow's economic vision for the Far North, where state-led development goals are not only determined by straightforward economic calculations, but also take into account more subjective geopolitical motivations intended to buttress Russia's international prestige and reinforce its self-concept of being a key global player.

Developing the Russian Arctic: Domestic and International Considerations

Domestically, the Russian government sees the High North as central to the country's development, not only in terms of exploiting its natural resources and geographic location, but

also as providing a revenue engine capable of furthering regional integration into the Moscowcentered economy. The latter represents a real concern, as parts of Siberia and the Russian Far East are more closely tied economically with their Asian neighbors than Russia's European heartland.⁵

Arctic development is likewise regarded as a means of stemming demographic declines in Russia's northern regions, where decrepit Soviet-era monotowns still arise incongruously from the tundra, transportation infrastructure is woefully lacking and the distances between population hubs are vast. Re-invigorating these sparsely inhabited hinterlands is, among other things, viewed as a way to ensure territorial integrity and bolster national security. As to why this is an issue, consider that if we include its Arctic islands, Russia's northern coastline stretches for roughly forty thousand kilometers (Antrim, 2010: 19)—a distance equivalent to the circumference of the earth at the equator—but most of it is guarded by nothing more than fierce weather patterns.

Internationally, meanwhile, the Arctic plays a growing role in Russian foreign policy. Tellingly, although the annexation of Crimea had taken place just weeks earlier, Putin emphasized the region during his April 2014 Security Council address, explaining that Russia wants to not only restore its previous role in the Arctic, but also to markedly strengthen its presence there at a time when the interests of regional states increasingly "intersect and collide" and even distant countries are eyeing the Arctic's potential (2014b).

Specifically, the Arctic is crucial to Moscow's much-vaunted pivot towards Asia. Despite the impact of Western sanctions and the Russian economy entering a recessionary phase, the European Union (EU) remains Russia's leading trading partner. In 2015, the country's total trade with the EU-28 amounted to more than 212 billion EUR, while the commensurate figure for trade between Russia and China was just slightly above 57 billion EUR (European Union, 2016: 8). Given that animosity and mistrust have come to define Russia's relationship to the West, this heavy economic reliance on the EU does not sit well with the Kremlin, which has come to view the European marketplace as prone to manipulation by anti-Russian ideologues.

Russia is working with multiple partners to reorient its trade flows to Asia, but China is indisputably the linchpin of the strategy. Citing "colossal potential" for bilateral cooperation with Beijing and describing the turn toward the region as "a chance to catch the 'Chinese wind' in the 'sails' of our economy" (2012b), Putin has stressed that far from feeling threatened by China's global ascendance, Moscow welcomes it. As a result, instead of trying to compete with Beijing's Silk Road initiative, the Kremlin has decided to piggyback on it, with Putin and Chinese leader Xi Jinping announcing during a May 8, 2015 press conference that the two countries would seek to integrate China's proposed "One Belt, One Road" trade and development framework with the Moscow-led Eurasian Economic Union.⁶ Concurrently, Putin issued an explicit invitation for China to partner with Russia on Arctic ventures (Ofitsial'nye, 2015b).

In sectoral terms, Moscow's plan for Arctic development is focused primarily on hydrocarbons, with the expansion of regional shipping a secondary, albeit closely related, goal. This is not surprising, as Russia possesses enormous energy reserves. According to a 2009 United States Department of Energy report, out of 61 major oil and gas fields in the Arctic, 43 are located within Russia's borders (Kramer & Krauss, 2011), and more are continually being discovered and explored.⁷ However, this means that Moscow's Arctic gambit is highly dependent on the vicissitudes of global energy markets. Showcasing how reliant the Russian economy is on

hydrocarbons, in 2013—the year before global prices collapsed—oil and gas accounted for 68% of export revenues (Metelitsa, 2014).

Two initiatives highlight the economic promise and peril of this region, along with its statusrelated appeal: Yamal LNG, a liquefied natural gas facility being built on an icy, wind-swept peninsula in northwestern Siberia, and Russian efforts to develop the Northern Sea Route (NSR) into a major shipping lane, one which, it is hoped, will someday become a viable alternative to the Suez Canal for moving cargo between Asia and Europe.

Yamal LNG

Located on the Gulf of Ob in the Yamalo-Nenets Autonomous Okrug, Yamal LNG will harness the Yuzhno-Tambeyskoye field, thought to contain 926 billion cubic meters of natural gas (Novatek, 2016). Construction began in 2012 and will continue until 2021, costing 27 billion USD.

Supplied by over 200 wells, it will have an annual LNG production capacity of 16.5 million metric tons once all three planned liquefaction trains are functioning. Additional infrastructure associated with the facility includes the new port of Sabetta (developed as a public-private partnership with the Russian government), an international airport, and a planned rail extension that will run nearly 200 kilometers south to Bovanenko, currently the world's northernmost rail terminus. Envisioned as a part of the proposed Northern Latitudinal Railway, this extension could eventually link Sabetta to the Trans-Siberian and Baikal-Amur Mainline railways (Putin, 2015a).

Being developed by Novatek, Russia's largest independent gas producer, together with France's Total (since 2011) and the Chinese National Petroleum Corporation, or CNPC (since 2013), in March 2016 Yamal LNG acquired a new partner when Novatek sold a 9.9% stake to China's Silk Road Fund (SRF)⁸ for 1.087 billion EUR, leaving it with 50.1% ownership (Total and CNPC retained their respective 20% positions) (Novatek, 2016).

Speaking at a trade event in March 2016, Yamal LNG's head, Evgenii Kot, revealed that 96% of the plant's projected output has already been booked in the form of long-term (20-25 year) contracts, with around 86% of it destined for Asia ("Yamal LNG," 2016c). During the summer months shipments are expected to travel directly from Sabetta to Asia, with transshipment via northern European ports the rest of the year (Shiryaevskaya, 2013). In preparation for the start of production, South Korean shipbuilder Daewoo is constructing up to fifteen Arc 7 class double-acting LNG tankers, the first having been launched in January 2016 ("DSME," 2016).

Until recently, however, Yamal LNG's future appeared uncertain. The United States imposed sanctions on Novatek in 2014, targeting both the company and its director, Gennadii Timchenko (personally close to Putin, Timchenko owns 23.49% of Novatek [Barsukov, 2016]), curtailing access to capital markets and dollar-denominated loans.⁹ Consequently, taking into account the contributions of Yamal LNG's partners, state subventions (including more than 2 billion USD from Russia's National Wealth Fund [Staalesen, 2015c]), a 730 million EUR loan from the SRF (Novatek, 2015), and 4 billion USD pledged by Russia's Sberbank and Gazprombank, the project was still short an estimated 10 billion USD in funding at the beginning of 2016. Meanwhile, Chinese banks were reportedly stalling on a long-awaited loan package because they wanted

European financial houses involved in the deal to mitigate their political risk (Barsukov, 2016). Amid this scenario, Novatek sought to assuage investors' fears in the beginning of March 2016 by reaffirming that it was committed to launching the first liquefaction train in 2017, notwithstanding the funding shortfall and speculation that operations might begin at a loss due to low gas prices ("Yamal LNG," 2016d). These unsettling developments prompted the Russian government to intervene, with Deputy Prime Minister Arkadii Dvorkovich telling reporters at the Boao Forum for Asia in late March 2016 that Chinese Premier Li Keqiang had agreed to "speed up" financing for the plant ("China," 2016). By the following month the situation was improving. On April 11, 2016 it was announced that loan agreements with Sberbank and Gazprombank had been concluded (Yamal LNG, 2016b), and less than three weeks later a deal worth over 12 billion USD was finally signed with China Development Bank and the Export-Import Bank of China (Yamal LNG, 2016a).

Moscow's advocacy on behalf of Yamal LNG is revealing, because unlike state-controlled Gazprom, which also has a presence on the peninsula and just began year-round shipment of its Novy Port oil via the NSR in early 2016, Novatek is a privately held firm. Putin has long been a vocal supporter of the project, declaring in a December 2015 press conference that he was "amazed" at how efficiently construction was progressing and observing that Russia had an obligation to support it in light of the substantial sums already invested by foreign businesses (2015a). Economic advantages aside, the successful completion of Yamal LNG holds considerable propaganda value, as it will undoubtedly be spun to highlight Russia's technological prowess and the impotency of Western sanctions. Moscow therefore cannot afford a debacle, particularly after terminating Gazprom's monopoly on LNG exports in 2013.

The Northern Sea Route

For all the mystique the Northwest Passage commands in the Western imagination, it is the Northeast Passage, and specifically the NSR portion of it,¹⁰ which holds the greatest promise for Arctic shipping given its potential to serve as a conduit between Europe and Asia.¹¹ With one terminus at Novaya Zemlya and the other at Cape Dezhnev on the Bering Strait, the NSR is not so much a defined route as a series of interlaced passages that primarily run along the Russian coastline, ranging from around 2,200 to 2,900 nautical miles in length (Østreng, 2010).

Soviet leaders had long sought to develop the NSR as an internal shipping lane.¹² They were fairly successful in this, with cargo transported peaking in 1987 at 6.58 million tons (Farré et al., 2014: 302). The USSR's collapse, however, ushered in a sharp decline in utilization, even though the NSR formally opened to foreign-flagged vessels in July 1991. Consequently, although segments of it continued to be plied by the Russian Navy and domestic ships, only in the last few years has the NSR come to be regularly, if erratically from year-to-year, visited by outsiders.

Post-communist Russia's push to promote Arctic shipping is not new; the 2001 Maritime Doctrine already addressed the importance of the NSR to the country's economic and strategic interests ("Morskaia doktrina," 2001). But the prospect was largely hypothetical until not that long ago. Two German heavy-lift vessels, the *Beluga Fraternity* and *Beluga Foresight*, brought the NSR to global prominence in 2009, when they traversed it in the course of a voyage that took them from South Korea all the way to Nigeria via various ports of call. Although they were not, as often claimed, the first foreign-flagged commercial ships to complete a transit of the NSR

(Revkin, 2009), their journey received wide media coverage due to its tie-in with global warming. Utilizing the NSR cut an estimated 3,000 nautical miles off the trip and saved 200 tons of fuel per vessel (Beluga, 2010), no small matter given bunker fuel typically accounts for more than two-thirds of a voyage's cost. Another highly publicized transit occurred in 2013, when the *Yongsheng*, operated by China's state-owned COSCO Group, became the first ship to transport containerized cargo along the NSR. It made the trip from Dalian to Rotterdam in just 35 days, shaving 2,400 nautical miles and nearly two weeks off a transit of the Suez Canal (McMillan, 2015). As these examples suggest, for shipping between many major hubs the NSR has the potential to save significant time and distance compared to traditional routes, while also lowering fuel consumption and avoiding piracy around the Strait of Malacca and Horn of Africa.¹³

However, the NSR also poses myriad challenges beyond the vagaries of Arctic weather (its full length has historically only been navigable for a few months per year), including: higher insurance premiums; shallow near-shore passages and the limited beam-width of Russian icebreakers, both of which restrict vessel size and preclude optimizing economies-of-scale; a lack of ice-strengthening on the vast majority of the world's commercial fleet; insufficient maintenance and emergency-response facilities;¹⁴ incomplete bathymetric data; and outdated or unavailable navigation and communication systems. Moreover, while under ideal conditions it is possible to travel the NSR without icebreaker accompaniment (as 14 of 18 transiting ships did in 2015 ["NSR Transits 2015"]) or ice pilots, if required the costs for these services can run into hundreds of thousands of dollars.¹⁵

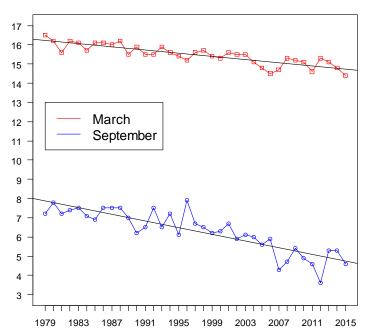
Environmental and political risks must similarly be considered. The Arctic's remoteness and ecological fragility guarantees a major maritime accident or oil spill will represent a public relations nightmare. Russia and other countries, most prominently the United States, also disagree as to whether portions of the NSR constitute internal waterways or international straits.¹⁶ (Jurisdictional issues became even more of a potential problem after the revised 2012 Federal Law on the NSR codified its boundaries as corresponding to Russia's Exclusive Economic Zone [EEZ]).¹⁷

Furthermore, in 2017 additional regulations on Arctic waterways are slated to go into effect when the International Maritime Organization's Polar Code is finally implemented.¹⁸ In short, the obstacles preventing the NSR from being an attractive option for shippers are substantial, and rectifying the most problematic of them will require huge upfront expenditures that Russia can ill afford at present. However, these capital outlays are essential if it is to become a full-fledged shipping lane.



Figure 2: Image created to author's specifications by Fei Carnes of Harvard University's <u>Center for Geographic</u> <u>Analysis</u> using ArcGIS.

Still, the NSR remains tempting, particularly given the unexpectedly rapid warming of the northern cryosphere. A 2007 study examining data from 1953-2006 found that Arctic sea ice had disappeared at a rate even faster than the most pessimistic models had earlier predicted (Stroeve, Holland, Meier, Scambos, & Serreze, 2007), and the overall trend has shown no signs of abating since then. Indicative of this, although ice levels fluctuate year-to-year and seasonal measurements are imperfectly correlated, in 2012 Arctic sea ice registered the lowest summer level observed since satellite monitoring began in 1979, while 2016 witnessed a new winter low, besting the previous record established in 2015 ("Daily Sea Ice," 2016). However, it is not just the extent of the ice cover that is decreasing; as melting intensifies during now-warmer Arctic summers, the ice that reforms in the colder months is increasingly becoming thinner and easier to navigate than multi-year ice, raising the possibility that the NSR could someday remain open year-round.¹⁹ In any case, if declines continue at the present rate, Arctic waters may witness virtually ice-free summers before mid-century (Overland & Wang, 2013).



Sea Ice Extent, Seasonal Min/Max (Million Sq Km)

Figure 3: Graph based on data from the National Snow and Ice Data Center's Sea Ice Index:20

Moreover, the NSR does not simply run along an east-west vector. It also possesses a northsouth component, with Russian officials keen to integrate it more fully into a transport corridor of railways and rivers such as the Ob, Yenisei and Lena in order to expedite the movement of raw materials out of the country's expansive interior to Arctic ports, as well as to resupply isolated inland communities. This is not without precedent. Norilsk Nickel, the world's leading producer of nickel and palladium, already utilizes the Yenisei River port of Dudinka, located 370 kilometers from the Arctic Ocean, to ship nearly year-round via the NSR, having begun doing so in 1979 (Armstrong, 1983: 254).²¹

Concomitantly, in keeping with the observation that the emergence of new maritime trade routes is not only dependent on climate and sea conditions, but is also driven by attempts to circumvent or attenuate political problems (Blunden, 2012: 117), Russia views increasing the commercial viability of the NSR as part of its broader Far East development strategy. As Russia's Minister of Economic Development, Alexei Uliukaev, recently stated, these projects represent "links in a chain," as "transit through the Northern Sea Route requires the use and capabilities of ports in the Far East and the ability to use ports in the Arctic Ocean basin" (Ofitsial'nye, 2016).

Putin, for his part, is clear about Moscow's vision for the NSR, calling once again for it to be turned "into a competitive transport corridor of global significance" during his September 2015 address to the Eastern Economic Forum in Vladivostok (2015c). (Three months prior, the Kremlin announced the completion of a classified fifteen-year development plan for the NSR.²²) To facilitate this, Russia is rebuilding its aging icebreaker fleet, with at least fourteen ships in the construction or planning phases (Staalesen, 2015a).²³ However, even without these new vessels Russia already controls more than half of the world's polar-class icebreakers, with nineteen owned by the state (including the only nuclear icebreakers in existence), and twenty-two more

operated by Russian firms. In contrast, Canada, another country with a vast Arctic coastline, possesses six total (O'Rourke, 2016: 10).

Russia is also putting into place formal institutions to aid the NSR's development. In May 2013 Prime Minister Dmitrii Medvedev signed a decree creating the Moscow-based Northern Sea Route Administration (NSRA) (Ministerstvo, 2013), which is responsible for issuing permits, ensuring navigational safety, assisting with emergency-response operations, and monitoring environmental conditions along the waterway.²⁴ Meanwhile, Russia's Arctic Commission was established in early 2015. Headed by Deputy Prime Minister Dmitrii Rogozin, its task is to centralize and coordinate policy implementation across the region, a significant portion of which concerns the NSR.²⁵

Bolstering trans-Arctic shipping will also require the participation of Asian states, and Moscow has been steadily laying the groundwork for this. During Putin's visit to China in May 2014, he and Xi issued a joint statement agreeing to foster collaboration across a number of spheres, including the NSR's utilization (Ofitsial'nye, 2014). Similarly, in December 2015 Russia's Minister for Far East Development, Aleksandr Galushka, and Xu Shaoshi, the head of China's State Committee for Development and Reform, signed a memorandum of understanding intended to strengthen regional cooperation, of which Arctic shipping is an integral component ("Minvostokrazvitiia," 2015).

Official expectations for the NSR's future tend toward optimism: Russian Deputy Prime Minister Arkadii Dvorkovich stated in June 2015 that the NSR has the potential to handle over eighty million tons of cargo annually by 2030 (Pravitel'stvo, 2015a). Likewise, China's Polar Research Institute has modeled a scenario under which between 5-15% of that country's international trade could pass through the NSR by 2020 (Doyle, 2013), with COSCO noting in August 2015 that it was "assessing the possibilities for more regular shipping between Europe and Asia along the NSR" and was "optimistic" about prospects for the future (cited in Staalesen, 2015b). Meanwhile, in January 2016 Kazuko Shiraishi, Japan's Ambassador of Arctic Affairs, announced that Japan was ready to redirect up to 40% of its Europe-bound cargo, which currently ships through the Indian Ocean, to the NSR (Zabelina, 2016).

Efforts to promote the NSR have yielded mixed results to date, however. Utilization grew dramatically in the early years of this decade, especially for trans-Arctic voyages. While only four transits were reported in 2010, 38 uninterrupted crossings took place in 2012, moving nearly 1.21 million tons of cargo ("NSR Transits 2012") and the same number occurred in 2013, moving almost 1.18 million tons of cargo ("NSR Transits 2013").²⁶ Yet since peaking in 2012-2013, both the number of transits and the volume of cargo transited have declined appreciably. In 2014, only 31 such voyages took place ("NSR Transits 2014"), accounting for 274.3 thousand tons of cargo ("Ob"em perevozok," n.d.). According to the head of the NSRA, this decline resulted from local economic conditions and not wider political problems (Litvintseva, 2014), but it is hard to accept this assertion unreservedly, especially as last year the number fell even further. In 2015 only 18 transits took place, resulting in just 39.6 thousand tons of cargo transits 2015"). As to what caused this dramatic dropoff, it is correlated with three broad factors: lower bunker fuel prices,²⁷ the August 2015 opening of a second shipping lane in the Suez Canal, and Russia's ongoing political isolation.

Nonetheless, even in these challenging economic conditions, the total volume of cargo shipped along the NSR has steadily risen, in large part due to the build-out of Yamal LNG and other Arctic projects (Olshevsky, 2016). Statistics reveal 5.43 million tons of cargo passed through at least a segment of the NSR in 2015, up from 3.98 million in 2014 ("Ob"em perevozok," n.d.). Moreover, although applying for a permit to use the NSR does not guarantee that a voyage will be made, in 2015 the NSRA received a total of 730 requests (132 of them from foreign-flagged vessels), up from 661 in 2014.²⁸

Realistically, the prognosis for Arctic shipping needs to be tempered.²⁹ The NSR will not replace the Suez Canal, which recorded 17,483 transits in 2015,³⁰ as a major cargo thoroughfare anytime in the near-to-medium term. With regard to utilizing it for container shipping, according to Maersk Group CEO Nils Andersen, this "is not something that will happen within the next 10 to 20 years" (cited in Milne, 2013). Even Russia's Deputy Transportation Minister, Viktor Olersky, has admitted that the NSR "is no alternative to the Suez Canal" (cited in Pettersen, 2013a). Instead, its prospects for the foreseeable future will remain highly dependent on hydrocarbon exports and the health of Russia's domestic shipping industry, particularly if tensions with the West do not abate and fuel prices remain depressed. Nor will continuing regional warming necessarily work in the NSR's favor, as this raises the possibility of still-shorter routes opening up through the so-called "donut hole" in the middle of the Arctic Ocean, which falls outside the legal jurisdiction of any state.³¹

Russia's Arctic Imaginary

Contextualizing the emphasis the Russian government is placing on projects such as Yamal LNG and developing the NSR requires assessing the wider relevance of the Arctic, a region that enjoys tremendous resonance in the national consciousness. Connoting "the great frontier: a place of adventure, symbol of territorial grandeur, and source of abundant resources" (Medvedev, 2016: 1), its appeal is not hard to comprehend. Russia has been a palpable presence in the Arctic since Tsarist times,³² and for much of the twentieth century it functioned as a space wherein the Soviet Union could credibly demonstrate its military, technological and scientific capabilities to the world. Moscow's northward turn is also occurring amid political efforts to selectively rehabilitate the Soviet past, and the USSR's impressive achievements in polar exploration, navigation and research are obvious fodder for this recourse to history. All these associations render the Arctic symbolically potent.

Exemplifying this, Putin's speeches concerning the region have consistently emphasized the interplay between material and status-seeking motivations and highlighted connections between economic and other policy drivers, as well as the physical and conceptual interconnectedness of the Arctic with other regions, both Russian and foreign. As he once declared, the Arctic is a "sphere of Russia's special interests" precisely because "practically all aspects of national security—the military-political, economic, technological, environmental, [and] resource-based" are concentrated there (2014b).

Consider the following: in his December 2012 address to the Federal Assembly, Putin noted that the enormous potential of Siberia and the Far East presents Russia with "an opportunity to occupy a worthy place in the Asia-Pacific region, the most energetic, dynamically developing region in the world" (2012a). Speaking before the same body a year later, he accentuated: "I am

sure that Russia's pivot to the Pacific Ocean, and the dynamic development of all our eastern territory, will not only open up for us new economic possibilities, new horizons, but will also provide us with additional instruments for conducting an active foreign policy" (2013). Subsequently, in his 2015 remarks Putin stressed the importance of the Northern Sea Route and Arctic to the development of the Russian Far East, along with the need to cooperate with Asian states and regional structures such as the Association of Southeast Asian Nations (ASEAN) and the Shanghai Cooperation Organization (SCO) (2015b).

Below, meanwhile, is an excerpt from the Russian President's 2014 keynote speech to the St. Petersburg International Economic Forum:

Nations want to determine their own fates, preserve their cultural, historical and civilizational identity. Given this, the whole geo-economic map of the world changes; alternative centers of economic growth, trade and investment routes form, new associations for integration arise and strengthen, the call is amplified for collective leadership in which to develop common, concerted decisions taken in solidarity, and not imposed by someone else (2014a).

Official documents mirror this integrated stance, with the seminal State Policy Principles in the Arctic to 2020 defining four areas of Russian national interests: exploiting northern resources for the country's socio-economic development; maintaining the polar region as a "zone of peace and cooperation"; preserving its environment; and expanding the NSR's utilization ("Osnovy," 2008). The 2014 iteration of Moscow's Arctic development plan to 2020 likewise sets four broad regional goals: ensuring national security; bolstering Russia's international standing; promoting socio-economic development; and introducing statistical monitoring ("Ob utverzhdenii," 2014).

The connection between economic and military drivers in Arctic policy is especially acute, as in the High North they are linked more tightly than in most other parts of the world due to the formidable logistics of operating in such an extreme environment.³³ This interdependence is evident in the 2015 Maritime Doctrine, which, relative to the Arctic, emphasizes: maintaining unimpeded passage between the Atlantic and Pacific, the growing significance of the NSR; the resources of the continental shelf; and protecting the polar environment (Ofitsial'nye, 2015a). Meanwhile, the 2015 National Security Strategy assigns the Arctic a role in bringing about a multipolar world and notes the need for expanding international cooperation in the region (Ofitsial'nyi, 2015).

Russia, of course, did not completely exit the Arctic after 1991. The Northern Fleet, based in the closed town of Severomorsk in Murmansk oblast, has long been the largest of its five geographic fleets, having assumed preeminent status in the Soviet naval hierarchy during the Cold War. Yet after more than two decades of neglect, the current pace of military rebuilding can legitimately be labeled as unprecedented. Since 2013, Moscow has been actively revitalizing abandoned Sovietera military installations and airfields, as well as constructing new facilities in such locales as Franz Josef Land and the Novosibirsk Islands. Work has progressed swiftly, with a high-ranking military source revealing in December 2015 that six bases had already been completed and equipped ("Russia Completes," 2015).

Looming behind these developments is the fear that a re-militarized Arctic stands poised to become a zone of conflict, proxy or otherwise. Responding to these concerns, Russia's Arctic Ambassador Anton Vasiliev justified Moscow's actions by highlighting the need to protect Russian economic interests and improve polar search-and-rescue capabilities, adding everything was being done "transparently and predictably" and that there was no intent to destabilize the region (cited in "Posol RF," 2014).³⁴ In a similar vein, an unnamed General Staff official explained that the new Northern Fleet-United Strategic Command (which went into operation in December 2014) would be responsible for "protecting Russia's Arctic shipping and fishing, oil and gas fields on the Arctic shelf, and the country's national borders in the north" ("Russia," 2014). Russian Foreign Minister Sergei Lavrov weighed in on the matter as well, recently stating that safeguarding Arctic shipping and the region more generally from accidents and myriad other threats represents an impossible task "without the restoration of the infrastructure, including military, which was almost entirely lost in the 90s" (cited in "Lavrov," 2016).

Clearly, real strategic interests are present in the Arctic,³⁵ and Russia is not the only state expanding its regional military footprint.³⁶ However, it must be borne in mind that Moscow's efforts to rebuild a military presence there are part of a larger initiative to modernize the entirety of the Russian armed forces. Moreover, its military facilities in the High North are increasingly being tasked with multiple-use functions, including supporting the Border Service (Lavrov, 2014). Moscow, thus far at least, appears more concerned with "the legal ramifications of the changing Arctic environment" and "establishing an irreversible precedent of control" over shipping than pursuing any grand strategic designs in the region (Flake, 2014: 112-13). Therefore, despite an increase in status-related brinksmanship after the annexation of Crimea (such as occurred when Putin ordered a massive snap drill in March 2015 as a response to NATO holding its largest northern exercise since 1967 in Norway),³⁷ no fundamental paradigm shift has occurred in the Kremlin's Arctic military strategy, which remains focused on three main goals: asserting Russia's sovereignty, shielding its economic interests, and demonstrating that it is still a world-class power (Sergunin & Konyshev, 2015).³⁸

A similar dichotomy between material interests and status-related optics is inherent in Moscow's revised submission to the United Nations' Commission on the Limits of the Continental Shelf (CLCS), which holds that Russia should be allowed to extend its territorial claims in Arctic waters beyond the standard 200 nautical-mile limit based on new mappings of its continental shelf morphology.³⁹ Submitted in August 2015, the pending claim contends that the Lomonosov Ridge, Mendeleev-Alpha Rise and Chukchi Plateau, along with the Podvodnikov and Chukchi Basins, are all underwater extensions of Russia's landmass ("Partial Revised," 2015). If the data provided are verified, Article 76.5 of the United Nations Convention on the Law of the Sea (UNCLOS) would allow Russia to extend its EEZ up to 350 nautical miles from land (or 100 nautical miles from the 2,500 meter isobar), granting it exclusive control of an additional 1.2 million km² of potentially hydrocarbon- and mineral-rich seabed.⁴⁰ However, as part of this filing, the Kremlin is also touting that the North Pole belongs to Russia. As the proposal, even if it were approved, would not grant control over the water column and the ocean floor at the Pole lies some 4,000 meters beneath its ice-locked surface, playing this up is a purely symbolic gesture.⁴¹ Still, who "owns" the Pole and the seabed around it has proven a contentious international topic.⁴² Indicative of this, Denmark (via Greenland) filed an overlapping submission with CLCS in December 2014 claiming an additional 895,000 km² of undersea territory for itself (Tulupov, 2015), and Canada is expected to follow suit in 2018 (Sevunts, 2016).

Russia's reengagement with the Arctic also encompasses more quixotic expressions of statusseeking. For example, during the Arktika 2007 expedition polar explorer Artur Chilingarov—a Duma deputy at the time—descended to the bottom of the Arctic Ocean in a submersible to plant a small Russian flag made of titanium beneath the North Pole, afterwards averring "[o]ur task is to remind the world that Russia is a great Arctic and scientific power" (cited in Chivers, 2007). Other examples include the Olympic torch traveling to the Pole aboard the Russian icebreaker *50 Let Pobedy* in 2013, and Bishop Iakov of Nar'ian-Mar and Mezensk releasing a memorial capsule into the Pole's frigid waters in September 2012 containing a message from the Russian Orthodox Church's head, Patriarch Kirill, on the occasion of "the 1150th anniversary of the Russian state's existence" (Arkhangelskaia eparkhiia, 2012).

The China Factor

An ironic byproduct of Western sanctions, Russia's Arctic ambitions increasingly hinge on Chinese financing and energy-market access.43 But this does not mean that Moscow's and Beijing's interests fully align. For one thing, although China officially affirms the littoral states' territorial claims in the Arctic, government representatives have sent distinctly mixed signals over the years.⁴⁴ Russia, like all the littoral states, adamantly opposes any hint of making the region an international commons along the lines of the 1959 Antarctic Treaty, a point underscored by the 2008 Ilulissat Declaration. China, meanwhile, has previously intimated its support for just such an arrangement. While this rhetorical strand disappeared in the run-up to China joining the Arctic Council as an observer in May 2013,⁴⁵ there remains a lingering wariness of Chinese motives and the reasons for it styling itself a "near-Arctic" state. For another, Russia's dependence on China does not fit comfortably with Moscow's increasing promotion of autarky and an import-substitution development model, forcing an awkward discursive shift away from competing with the West to allying with Asia for normative as well as material reasons.⁴⁶ Finally, even though China does not appear to have any territorial ambitions in the Arctic (or Siberia and the Russian Far East more generally) and the region is not nearly as high a priority for Beijing as it is for Moscow, Russia is still cognizant of the need to develop its northeastern flank in order to avoid it becoming "a resource base for China and its sphere of influence" (Trenin 2011: 190).

Moreover, the Chinese economy is facing headwinds and may be unable to digest all the fossil fuel Russia would like to feed it.⁴⁷ Trade relations are also profoundly unbalanced; on a country basis, China has been Russia's leading trading partner since 2009, but the Russian market represents a tiny one for China, absorbing 1.53% of its exports in 2015 ("Distribution," 2016). Beijing therefore has reason to avoid alienating its Western trading partners by cooperating too closely with Moscow. Russian businesses, meanwhile, are leery of borrowing from Chinese lenders; not only do costs tend to be considerably higher, but giving China control over the purse strings provides it with unwanted leverage in negotiating future commodity prices. Beijing has also developed a reputation for over-promising and under-delivering on large-scale foreign projects, implying Russian-Chinese cooperation may be more aspirational than realizable.⁴⁸

As a result, despite outwardly amicable diplomatic relations and efforts to promote not only economic partnerships between the two countries, but also cooperation across military and scientific spheres,⁴⁹ there exists an undercurrent of reticence in the relationship, neither state appearing to be the partner of first choice for the other. Along these lines, it is worth noting that

Russia's largest military exercise since the Soviet period, *Vostok 2014* ("East 2014") took place not on Europe's doorstep, but rather in the Russian Far East. Thus, while today Russian politicians reserve their public opprobrium for NATO, Russian military leaders continue to regard China as a potentially major strategic threat.⁵⁰

In short, Beijing needs Russia for its natural resources, as China is seeking to cultivate multiple sources of energy and raw materials to insulate its economy from exogenous shocks, while Moscow needs China for its capital. This, coupled with the emphasis both states place on creating a multi-polar world and upholding hard conceptions of state sovereignty, explains their natural, if unsentimental, alliance. It also does not hurt matters that both countries assiduously avoid criticizing one another's domestic policies and human rights records. (It should be noted, however, that China is forging economic and political relationships with multiple northern nations.⁵¹) Moreover, as Russia is the only Arctic state that shares a border with China, why Moscow would prefer to have Beijing as an ally rather than an adversary is no mystery. Unlike Tsar Peter I, who wanted a "window to the West," Vladimir Putin increasingly needs a portal to Asia, but this does not mean tensions do not lurk below the surface of Russian-Chinese relations.

Conclusion

Former Canadian Prime Minister Stephen Harper liked to remind audiences that "the first principle of Arctic sovereignty is use it or lose it" (cited in Austen, 2007). Russia has taken this admonition to heart, intent on asserting itself as the leading northern power. However, whether Russia will be able to achieve the full scope of its Arctic ambitions is still very much uncertain, as there exists a wide disconnect between Moscow's sanguine pronouncements and the rate at which investment capital is flowing into the region. So while likening the Kremlin's Arctic development plans to a "Potemkin village" (Medvedev, 2016: 5) is overly pessimistic, the fact remains that bold statements about the region's potential have thus far proven more bluster than prediction.

Indicative of this, in March 2016 Aleksandr Tsybul'skii, Russia's Deputy Minister of Economic Development, stated that implementing Russia's Arctic development goals through 2020 would cost 260.2 billion rubles ("Minekonomrazvitiia," 2016), a modest increase from the 222 billion rubles Dmitrii Rogozin had previously cited for this same period ("Rogozin," 2015). However, after a May 2016 Arctic Commission meeting, it was announced that 145 priority projects (no date was specified for their completion) would alone require investments totaling around 4.8 trillion rubles, of which about 3.75 trillion would have to come from off-budget sources (Pravitel'stvo, 2016). Finally, on September 7, 2016, Alexei Uliukaev reported that some 150 Arctic projects would require investments totaling 5 trillion rubles by 2030 (Ofitsial'nye, 2016). Even this latter sum, however, may prove too low to build-out the comprehensive infrastructure required to achieve Moscow's aggressive development targets.⁵² Nor can foreign investment or financing be counted on in the present geopolitical climate.

Western sanctions have hurt Russia not only by restricting the availability of external capital, but also by making it more difficult to access the expertise and equipment needed to tackle demanding Arctic projects.⁵³ The need for foreign technology and services is especially acute for offshore drilling in the region, with one expert estimating that Russia will not be able to muster domestic equivalents before 2020-2025. Meanwhile, replacing the required equipment with

Chinese or other third-party substitutes is risky (Panichkin, 2015). Collapsing hydrocarbon prices have only exacerbated the situation, making many long-planned ventures, like the development of the gargantuan Shtokman gas and condensate field in the Barents Sea, economically unfeasible.⁵⁴ Lower energy prices, along with heightened political risk, have also reduced the NSR's allure. China, meanwhile, has proven more reluctant to invest in Russian oil and gas ventures than homegrown proponents of the "Asian pivot" had initially anticipated, although it continues to actively explore the possibilities for Arctic shipping.

In conclusion, Russia's growing Arctic presence is being propelled by a re-imagining of its commercial and strategic possibilities, a move that is predicated not only on the rise of the Asia-Pacific region and an ensuing recalibration of trade relations, but also Moscow's estrangement from the West. This leaves the Kremlin balancing between the nationalistic appeal the Arctic holds for its domestic constituents and the critical skepticism with which many international observers have greeted Russia's plans for regional development. While the reputational costs of failing to deliver on economic promises differ based on the audience in question, Moscow is currently unwilling to pay either price. As the Russian Minister of Natural Resources and the Environment, Sergei Donskoi, stated in May 2016, postponing regional development until macroeconomic conditions improve will not happen "under any circumstances" (cited in "Neft' i gaz," 2016). Plainly, the Kremlin does not want to lose its hard-won share of the global hydrocarbon market, but such categorical pronouncements also implicitly concede that statusrelated concerns have, at least temporarily, eclipsed objective material realities. This should not surprise us, as the Arctic represents a region where operating even under optimal conditions requires considerable technical competence and resources, rendering it a geographic canvas upon which states can project power and signal their rising international stature.

Notes

1. This was also, in part, a response to the growing interest other states were beginning to exhibit toward the region and its resources, a trend that was on ample display by 2007. Marking the start of the Third International Polar Year (which actually ran to 2009, the prior polar "years" being 1882-1883 and 1932-1933), 2007 saw a precipitous decline in Arctic summer sea ice cover. The latter caused a general upwelling of environmental and economic interest in the region, including among countries like India that were geographically far removed from it. The motivations that propelled these new players into the polar game were multifaceted. Certainly, a warming Arctic could presage rising sea levels and adverse weather effects throughout the world, making its study germane to countries with densely populated, low-lying coastal areas such as China and Japan. The economic promise associated with rapid climate change also provided an impetus, as did the desire of ascendant powers, most notably China, to showcase their increasing international importance (China has in recent years developed an active polar research program [see "China's Polar Research," n.d.]). Also noteworthy is that the growing international attention that started to be paid to the Arctic in the latter half of the 2000s coincided with a dramatic increase in geopolitical tensions between Russia and the West (for example, over Kosovo and South Ossetia).

- 2. In his address to the 1st annual International Arctic Forum held in Moscow, Putin noted that while "serious geopolitical and economic interests intersect in the Arctic" he had "absolutely no doubt that existing Arctic issues, including questions about the continental shelf, can be resolved in the spirit of partnership, through negotiations and on the basis of existing international legal norms" (2010). Despite everything that has happened since, Russia appears to be adhering to this script.
- 3. Many observers believe—citing, for example, the signing of binding agreements on Arctic search and rescue (2011) and marine oil pollution preparedness and response (2013)—that the Council will remain a sufficient *modus vivendi* for dealing with the High North, despite it now being far larger than when it was founded in 1996 due to the addition of twelve states as non-voting observers and the fact that five out of its eight voting members belong to NATO, including all of the Arctic littoral states save Russia. (The Council has no mandate to deal with strategic issues under the terms of the Ottawa Declaration.) But there have been occasional manifestations of political discord. For example, Canada took a hard line with Moscow under Stephen Harper's Conservative government, with Minister of the Environment Leona Aglukkaq (at the time also Chair of the Council) refusing to attend a three-day task force meeting held in Moscow in 2014 to protest Russia's actions in Ukraine. And when in April 2015 United States Secretary of State John Kerry assumed the two-year chairmanship of the Council in Iqaluit, Canada, Russian Foreign Minister Sergei Lavrov was conspicuously absent.
- 4. For examples of social constructivism related to economic matters, see Abdelal, Blyth & Parsons, 2010; Herrera, 2007; Abdelal, 2001.
- 5. For a relevant discussion, see Bennett, 2014.
- 6. The "One Belt, One Road" initiative consists of both the land-based Silk Road Economic Belt (SREB) encompassing Central Asia and more distant regions, and the Maritime Silk Road (MSR) linking Southeast Asia, Oceania and North Africa.
- 7. Offshore exploration and drilling in the Russian Arctic, in particular, is still in its infancy. The first such well, located in the Pechora Sea's Prirazlomnoe field and originally developed as a collaborative venture between ExxonMobil and Gazprom, only went into production in December 2013.
- 8. The SRF was established by Beijing in December 2014 to foster economic ties across Eurasia by focusing on the development of industrial assets, energy resources and regional infrastructure.
- 9. EU sanctions do not specifically target Novatek or Timchenko, but European banks are unlikely to risk incurring Washington's disapprobation (or angering their own governments) in order to bankroll the project.
- 10. The Northeast Passage is technically longer, as it extends past Novaya Zemlya into the Barents Sea, but the two designations are often used interchangeably.
- 11. To give an indication of the magnitude of this market, in 2014 eight of the ten top exporters of containerized cargo were Asian countries. China was the largest source, accounting for over 28% (36 million TEU [Twenty Foot Equivalent Units]) of the containerized cargo shipped by the world's top twenty exporters. Meanwhile, the top twenty EU importers of containerized cargo in 2014 accounted for more than 16 million TEU of goods (note: statistics exclude Cyprus and Malta and treat Belgium/Luxembourg

and the Baltics [Latvia, Lithuania and Estonia] as single analytical units) ("Trade Statistics," n.d.).

- 12. On early Soviet attempts, see Armstrong, 2011 [1952].
- 13. Whether it is ultimately a shorter route between Asia (or North America) and Europe depends on the point of origin and the final destination. Hong Kong is essentially equidistant from Rotterdam via the NSR or Suez Canal, meaning all else being equal, the NSR represents the shorter option for more northerly ports, and the longer one for more southerly ones (Blunden, 2012: 120). For example, sailing from Rotterdam to Vancouver covers 13,445 nautical miles via the NSR, compared to 16,350 via the Panama Canal and 28,400 via the Suez Canal. But sailing from Barcelona to Hong Kong via the Suez is only 14,693 nautical miles, versus 20,686 via the NSR (Christensen, 2009: 2).
- 14. In 2009, it was announced that 10 new search-and-rescue/emergency-response centers were to be built by 2015, but as of the first half of 2016, only those located at Dikson, Tiksi and Pevek were functioning according to the NSRA's website ("Obespechenie," n.d.).
- 15. See "Tarify," n.d. for the rate schedule.
- 16. See Treadwell, 2015; Flake, 2014: 110; Fadeev, 2013; Solski, 2013. At issue are differing interpretations of UNCLOS' Article 234, which grants coastal states special rights intended to prevent or mitigate pollution of ice-covered waters, and Russia's stance that the NSR falls under its legal control because it represents an "historically established integrated national transport and communications" route ("O vnutrennikh," 1998). A similar point of contention exists between Canada and other countries, most notably the United States, concerning the Northwest Passage.
- 17. See "Federal'nyi zakon," 2012.
- 18. See "What does the Polar Code," n.d. for details.
- 19. Already in 2015 the NSR remained navigable into late December, when the Russian nuclear-powered icebreaker *Vaygach* navigated it in a little over seven days at an average speed of more than twelve knots per hour (Rosatomflot, 2015).
- 20. See Fetterer, Knowles, Meier & Savoie, 2016.
- 21. The Yenisei port of Igarka, established in 1929, sits even further upstream: it is located nearly 700 kilometers from the NSR.
- 22. For more details, see Pravitel'stvo, 2015b.
- 23. Among them is the largest nuclear icebreaker ever built, a 173-meter-long behemoth slated to enter service in 2017. This 33,500 ton dual-reactor vessel will be capable of breaking through ice up to 13 feet thick (Pettersen, 2013b).
- 24. See "Predmet," n.d. for additional information.
- 25. In early 2016, Rogozin proposed the creation of new entity that would actively promote the NSR and coordinate transportation logistics along it ("Arktika v fokuse," 2016).
- 26. Author's calculations, made on the basis of "NSR Transits 2012" and "NSR Transits 2013." Officially, 46 transits took place in 2012, moving more than 1.26 million tons of cargo and 71 transits took place in 2013, moving nearly 1.36 million tons of cargo. However, as Humpert (2014) and Keil (2014) have noted, statistics for 2013 include voyages that were not full transits, either because they did not span the entire NSR, made stopovers within the NSR, or both began and concluded within its confines. The same holds true for eight voyages counted as full transits in 2012. (Note, though, that as the

reported data are not entirely clear in all instances, certain educated assumptions had to be made to derive these figures.) An email sent to the Northern Sea Route Information Office on May 30, 2016 requesting clarification was not answered.

- 27. Although at the time of writing bunker fuel prices have rebounded from lows set in early 2016, they remain significantly depressed: as of 27 May 2016, the average price for 380 CST fuel was 272.21 USD/metric ton, as compared to 398.21 USD/metric ton a year prior. Two years earlier, the average price was 626.45 USD/metric ton ("Bunker Index," n.d.).
- 28. "Postupivshie zaiavleniia 2015" and "Postupivshie zaiavleniia 2014."
- 29. See, for example, Ørts Hansen, Grønsedt, Lindstrøm Graversen, & Hendriksen, 2016; Humpert, 2013; and *Arctic Marine*, 2009.
- 30. See "Brief Yearly Statistics," n.d.
- 31. See Smith & Stephenson, 2013 and Humpert & Raspotnik, 2012.
- 32. The brainchild of Tsar Peter I, Vitus Bering's Great Northern Expedition took place between 1733-1743, under the sponsorship of Empresses Anna and Elizabeth.
- 33. Language about the need to protect Russian interests in the Arctic appeared in the Russian Military Doctrine for the first time in December 2014 (Klimenko, 2015).
- 34. Consonant with this assessment, the United States' Special Representative for the Arctic, retired Admiral Robert Papp, observed that "Russia is doing those things we would be doing ourselves if there was an increase in traffic above our coast" (cited in Jopson & Milne, 2015).
- 35. Moscow, for instance, has felt vulnerable against aircraft and ballistic missiles from the time military complexes in the Arctic deteriorated or were abandoned in the 1990s (Ponomarev, 2014). Meanwhile, warming waters have eroded what Western military strategists during the Cold War referred to as the "fourth wall" of Soviet enclosure (see Antrim, 2010), Arctic ice cover having served to contain the USSR but also, in turn, protecting it from its enemies.
- 36. Canada, in particular, is also expanding its military capabilities in the Arctic.
- 37. It involved 38,000 service members, 41 naval vessels, 15 submarines, and 110 aircraft (Sergunin & Konyshev, 2015), dwarfing the scale of NATO's earlier *Joint Viking* exercise, which deployed 5,000 military personnel.
- 38. Military status-seeking, however, has been on ample display in recent years (see, for instance, Pettersen, 2014 and Kramer, 2013). Moreover, strategic drills have increased significantly in scope and scale on both sides after NATO and Russia stopped hosting joint training exercises in 2014.
- 39. Russia's first claim, submitted in December 2001, was denied for technical reasons.
- 40. The figure of 1.2 million km² has been widely reported, though in September 2016 Sergei Donskoi, Russia's Minister of Natural Resources and the Environment, stated Russia stood to gain 1.3 million km² (Ofitsial'nye, 2016).
- 41. This is about 1,550 meters deeper than the Gulf of Mexico-based *Perdido*, currently the world's deepest offshore oil rig, operates at.
- 42. Deciding the matter, however, may take decades, particularly as the final disposition will need to be directly negotiated between the parties involved and, if no agreement can be reached, may be referred to the International Court of Justice (Tulupov, 2015).

- 43. Large-scale cooperation with Russian enterprises only dates to 2013, when CNPC partnered with Rosneft to conduct surveys in the Pechora and Barents seas and bought into Yamal LNG (Kuersten, 2015). Yet despite having shut China out of majority ownership of oil and gas projects for years, in February 2015 Arkadii Dvorkovich announced that Moscow would consider allowing Chinese firms to own a controlling stake in strategic land-based hydrocarbon fields, defined as those holding more than 70 million metric tons of oil or 50 billion cubic meters of gas (Starinskaia, 2015).
- 44. Recognizing the sovereign rights and territorial claims of the Arctic littoral states was an explicit precondition for China gaining observer status in the Arctic Council in May 2013 (see "Observers," 2015). However, in the past Chinese officials and academics have questioned these claims, as when Rear Admiral Yin Zhou declared in 2010 that "the current scramble for the sovereignty of the Arctic among some nations has encroached on many other countries' interests" (cited in Chang, 2010). See Jakobson & Peng, 2012: 14-16, for how Chinese rhetoric concerning the Arctic has changed in recent years. (For a Russian perspective on China's participation in the Arctic Council see Tulupov 2013; for a general discussion of Chinese interests in the Arctic, see Karlusov, 2012.)
- 45. Formalizing the status of "outsider" countries such as China in the Council, even as nonvoting observers, reinforces its centrality in handling Arctic matters (for background, see Jakobson & Peng, 2012: 11-14). At the same time, giving China a seat at the table legitimates its presence in the Arctic and provides it with the ability to influence regional policy (Feng, 2015).
- 46. An example of the latter was evinced at the May 2015 press conference where Putin welcomed Chinese participation in the Arctic, which took place on the eve of Russia's 70th commemoration of Victory Day. The timing prompted Putin to link Russia and China by noting that "our two countries suffered the greatest losses" in WWII, which, according to him, explains why Russia and China both oppose the rehabilitation of "Nazism and militarism" and the falsification of history. Not only was this an obvious denunciation of the post-Maidan government in Kyiv, but it also represented an attempt to historically legitimate stronger bonds with China. As Putin concluded: "Our common heroic past has become a good basis on which to build mutually beneficial, neighborly bilateral relations in the 21st century" (Ofitsial'nye, 2015b).
- 47. China is today the world's largest hydrocarbon importer (Dunn, 2014), and Russia has made considerable inroads into its oil and gas markets, having become China's largest monthly supplier of oil for the first time on record in May 2015, when it temporarily supplanted Saudi Arabia (Raval, 2015). That same year China became the main importer of Russian oil (Kaczmarski, Kardaś & Jakóbowski, 2016).
- 48. A Chinese media report from 2015 claimed that the SRF had already committed to nearly a thousand projects with an estimated aggregate cost of 890 billion USD (Schuman, 2015), raising questions of how it would finance them all. Specifically regarding Russia, China has been slow to commit funds for hydrocarbon projects, with most of the deals signed so far being non-binding framework agreements (Kaczmarski, Kardaś & Jakóbowski, 2016). All this has prompted some pundits to preemptively label Moscow's "Asian pivot" a failure (see Eder & Huotari, 2016; Gabuev, 2016; Putz, 2016).

- 49. For instance, in September 2016 Russia and China held bilateral military exercises in the South China Sea (Gady, 2016) and kicked off a joint scientific expedition to the North Pole ("Kitai i Rossiia," 2016).
- 50. The "China as potential foe" rhetoric has been downplayed since 2014, but before then it was quite prevalent. See, for instance, the comments of the Commander-in-Chief of Russia's Navy, Admiral Vladimir Vysotskii, in "Rossiia obespokoena," 2011.
- 51. For a survey of other Arctic states in which China is interested, see Feng, 2015.
- 52. Achieving 2030 Arctic offshore production targets of 65 million tons of oil and 230 billion m³ of gas annually may alone demand investments totaling more than 1 trillion USD (Panichkin, 2015).
- 53. For a discussion, see Mordiushenko, 2015.
- 54. The Russian Ministry of Energy cites a break-even figure of 63 USD/barrel for Russia's Arctic oil ("Neft' i gaz," 2016).

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